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ABSTRACT

Early Americans were credited with holding the Protestant work ethic, a set of work-related beliefs involving the traits of industriousness, individualism, ascetism, community involvement, and an overall valuing of work as the most worthwhile way to spend one's time. The American work ethic today is not the same as it was in early America. In order to examine whether the American work ethic today is undergoing a significant change, it is important to examine the major characteristics of individuals who endorse the Protestant work ethic. This study was conducted to investigate the relationships between the Protestant work ethic and some demographic variables in a sample of 689 subjects in the middle Tennessee area. Subjects completed a 25-page questionnaire which included the Mirels-Garrett Protestant Work Ethic Scale and items measuring selected demographic variables. The results revealed that Protestant work ethic endorsement was positively related to Republican Party identification and negatively related to age, educational level, employment status, annual income level, and marital status. A similar pattern of results was also found using one-way analyses of variance. (Author/NB)

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Some Demographic Correlates of The Protestant Work Ethic

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Abstract

The present study examined the relationships between the Protestant work ethic (Mirels & Garrett, 1971) and some demographic variables in a sample of 689 subjects. The results showed that Protestant work ethic endorsement was positively related to Republican Party identification but negatively related to age, educational level, employment status, annual income level, and marital status. A similar pattern of results was also found using one-way analyses of variance.

Some Demographic Correlates of the Protestant Work Ethic

Americans were credited with holding a set of work related beliefs called the Protestant work ethic involving the traits of industriousness, individualism, asceticism, community involvement, and an overall valuing of work as the most worthwhile way to spend one's time (Weber, 1904-1905/1958). This value system was espoused by Calvinist, Pietist, and Puritan sects in colonial times. However, the American work ethic today is not the same as it was in early America. America is becoming, according to Albee (1977), a society where only the experience of the moment is important and pleasure is the overriding goal. The idea may seem rather trite, but it does express a pervasive attitude among the American people today (Buchholz, 1977; Sheppard & Herrick, 1972).

If hard work, thrift, and industriousness are no longer valued, does this affect the attitude toward work? In addition, in order to examine whether the American work ethic today is undergoing a significant change, it is important to examine the major characteristics of individuals who endorse the Protestant work ethic. Therefore, the purpose of the present study was to investigate two questions. First, what were the characteristics of those people who endorsed the Protestant work ethic? And second, were there notable differences in adherence to the Protestant work ethic between or among the various demographic groups?

In the psychological literature, several empirical research studies have examined the Protestant work ethic (Blood, 1969; McClelland, 1961; Wollack, Goodale, Wijting, & Smith, 1971). Mirels and Garrett (1971) operationalized the Protestant work ethic as a personality variable and developed a 19-item scale to measure this psychological construct. Behavioral correlates of the Protestant work ethic have also been assessed (MacDonald, 1972; Merrens & Garrett, 1975).

Further, a conceptual framework for measuring work beliefs (Buchholz, 1978); different measures of the Protestant work ethic (Waters, Baltis, & Waters, 1975); correlations between the Protestant work ethic and certain related personality variables (Furnham, 1983; Mirels & Garrett, 1971), the relationships between work ethic and work and leisure (Poulton & Ng, 1988; Tang & Baumeister, 1984), demographic variables (Aul, 1978; Beit-Hallahmi, 1979), belief variables (Furnham, 1983a, 1983b, 1984a), and correlates of Protestant work ethic beliefs in different cultures were also investigated in the literature (Bluen & Barling, 1983; Furnham & Muhiudeen, 1984; Heaven, 1980; Ma, 1986; Ray, 1982). In the following paragraphs, the relationships between the Protestant work ethic and demographic variables will be discussed.

Demographic Variables

Educational Level. Heuristically, education may be related to a diversity in beliefs about work, e.g., level of education is positively correlated with belief in the Protestant work ethic. However, some of the psychological research using Protestant work ethic scales does not support this viewpoint. MacDonald (1972) found that the Protestant work ethic was unrelated to years of schooling in a sample of college students. Aldag and Brief (1975) revealed that proPE items did not correlate with educational level. Further, Buchholz (1977) administered her Beliefs about Work Scale to a group of top level managers and found no significant differences between the scores of the various educational levels in relation to the work ethic belief system.

Although Wollack et al. (1971) and Goodale (1973) reported a positive relationship between work values and educational level in samples of unemployed persons, Gooding (1972) found that people with more education were less inclined

to accept traditional beliefs. Some recent papers support Gooding's opinion (Furnham, 1982; Ma, 1986). Furnham (1982) found, in a sample of working adults, that the more educated a person was, the less he or she endorsed the Protestant work ethic. Ma (1982) also found that more freshmen and sophomores tended to endorse the Protestant work ethic than juniors and seniors in a sample of Taiwanese students.

In summary, although many research studies have found mixed results concerning the relationship between endorsement of the Protestant work ethic and educational level, more recent reports (Furnham, 1982; Ma, 1986) indicate that a relationship may exist, i.e., the more education a person has, the less he or she endorses the Protestant work ethic. Hence, the following hypothesis was proposed:

H1: People with more formal education will have lower Protestant work ethic endorsement than will people with less formal education.

Political Affiliation. The Protestant work ethic is hypothesized to be strongly related to the development of capitalism (Weber, 1904-1905/1958). One might expect that right-wing conservatives would be more capitalistic in their political outlook than left-wing liberals. Rojek (1973) reasoned that since the Republican party is traditionally associated with big business and capitalism, it is reasonable to expect that Protestant work ethic believers will tend to be Republicans.

Rojek (1973) could not find, within two Protestant groups (the liberal and the fundamental), a Republican party preference that would confirm the notion of Protestant work ethic believers being more capitalistic in their economic views. However, MacDonald (1971, 1972) found that scores on the Protestant work ethic scale were positively correlated with conservative beliefs. Furnham (1983b) has

also pointed out that those endorsing the Protestant work ethic appear to resist social changes and are fairly rigid and conservative in their views.

Finally, Beit-Hallahmi (1979) found that for American students, Protestant work ethic scores were strongly related to political identification. Those students who identified with the conservative political orientation identified more strongly with the Protestant work ethic than other students who identified with the left, liberal, or center political orientation. Therefore, several findings support the positive relationship between political affiliation (Republican) and Protestant work ethic. To investigate this notion, the following hypothjesis was proposed:

H2: The Protestant work ethic score is positively related to identification with the Republican party.

Sex. Wollack et al. (1971) reported effects due to sex on Survey of Work Values (SWV) in a sample of unemployed and employed individuals. Furnham and Muhiudeen (1984) also indicated that there was a significant sex difference: female had higher Protestant work ethic scores than males. However, Tang (1988), MacDonald (1972), and Mirels and Garrett (1971) suggested that there was no relationship between sex and the Protestant work ethic belief. Goodale (1973) also found that sex was not a major correlate of the SWV in a sample of unemployed individuals. Further, Buchholz (1978) revealed no significant difference between the scores of men and women on the belief system. No sex differences were indicated in a sample of Taiwanese students (Ma, 1986). Hence, there was little empirical support concerning the relationship between sex and the Protestant work ethic, the following hypothesis was proposed:

H3: There is no relationship between sex and the Protestant

work ethic belief.

Race. Although the Protestant work ethic may be a current societal value of the American majority, one might expect that those individuals who are less a part of society would adhere to it less. Possibly, members of minority groups might espouse the Protestant work ethic less frequently than members of the white majority.

Wollack et al. (1971) reported that race was a major item in the compositions of background factors which correlated with subparts of the SWV. They found that black people who held low level jobs were associated with high attitudes towards earnings and low preferences for activities at work.

However, ul Hassan (1968) did not find race-related differences in work ethic belief among urban and rural workers. In addition, Aul (1978) and Buchholz (1978) found that there was no relationship between race and the Protestant work ethic belief. Therefore, while there has been some evidence of a relationship between race and Protestant work ethic endorsement, it is not strong. Based on the above research findings, the fourth hypothesis was proposed as follows:

H4: There is no relationship between race and the Protestant work ethic belief.

Age. If belief in the Protestant work ethic is indeed on the decline in America (Ryterband & Bass, 1973; Wilson, 1970), then it is probable that older individuals will adhere to it more than younger individuals. Goldstein and Eichhorn (1961) found that those who adhered to the Protestant work ethic were older. Goodale (1973) found that age was positively related to the Protestant work ethic, as did Aldag and Brief (1975).

However, no significant correlations between age and the Protestant work

ethic belief were found among a sample of college students (MacDonald, 1972) or among top managers (Buchholz, 1977). Additionally, Furnham (1982) and Ma (1986) found that there was no age difference in relation to Protestant work ethic scores. But interestly, Buchholz (1978) found that young people were more oriented towards the Protestant work ethic than other age groups in samples of workers and top managers. Because the results of the various studies concerning age and the Protestant work ethic were mixed, no a priori prediction concerning the relationship between the Protestant work ethic and age was made in the current research.

Employment Status. If the protestant work ethic is strongly related to the valuing of work, it is logical to assume that those who advocate it more strongly would be more likely to be employed. Goodale (1973) reported that there were significant differences in the work-related value system between the hard-core unemployed and employed unskilled or semiskilled workers. However, actual empirical support in this matter is meager. The relationship between employment status and the Protestant work ethic was examined and no specific hypothesis was proposed.

Income Level. Only one study has assessed the interrelationship between income level and Protestant work ethic endorsement. Furnham (1984b) found that there was no difference between income level and the Protestant work ethic, but high income people tended to be liberal, have strong leisure eithic beliefs, and be involved in work. Tang (1986) found no significant difference on work ethic endorsement between professional employees and clerical workers. However, the income level of these employees was not examined in that study. In the present study, the income level was treated as an exploratory topic.

Marital Status. Few studies have directly examined the Protestant work ethic belief as related to marital status. Wollack et al. (1971) reported that marital status, an item in the compositions of background factors, correlated with subparts of the SWV. They found that married black people who were raised in the South placed great value on earnings. However, actual empirical support in this matter is meager. Hence, no a priori prediction concerning the relationship between the marital status and the Protestant work ethic was made in the present study.

Method

Subjects

A 25-page questionnaire was distributed to people in the middle Tennessee area. Of the 1,200 copies of the questionnaire, 769 copies were returned. A total of 689 usable questionnaires were retained for subsequent analyses.

Five hundred and three subjects indicated their occupation on the questionnaire. Based on the information of this item, subjects were classified as social service worker (n = 6), minister/people work in religious and church organization (n = 16), school teacher (n = 22), information/communication/librarian (n = 7), supervisor (n = 22), personnel manager (n = 33), engineer (n = 33), student/student worker (n = 56), food service/restaurant worker (n = 37), secretary/clerk (n = 44), cashier/sales clerk (n = 32), computer programmer/operator (n = 8), homemaker (n = 7), sales (n = 22), health care worker (n = 13), technician (n = 19), accountant/bookkeeper/bank teller (n = 17), manager/owner (n = 39), college professor (n = 11), military/police/fire fighter/security (n = 14), production worker (n = 33),

miscellaneous (lawyer, n = 2; writer/editor, n = 3; farmer, n = 3; woodworker, n = 2; hairstylist, n = 2), and other (n = 186).

Measures

The Mirels-Garrett Protestant Work Ethic Scale (Mirels & Garrett, 1971) was used to measure the Protestant work ethic (PWE). The scale consists of 19 items. It was developed on three large samples of American students and appeared to show good internal consistency (Cronbach alpha = .79; Mirels & Garrett, 1971). The response format for each item is a scale ranging from -3 (I disagree strongly) to +3 (I agree strongly) with the 0 excluded. For the ease of scoring, the responses are converted to a 7-point scale by adding a constant of four to each item. A 7-point scale was used in the present study. Total scores range from 19 to 133. This Mirels-Garrett Protestant Work Ethic Scale has been used extensively in studies of work beliefs among employed individuals as well as students (Furnham, 1982; Kidron, 1978; Lied & Pritchard, 1976; Tang, 1985; Tang & Baumeister, 1984).

The demographic variables included in the current study were sex, age, ethnic background (White, Black, Puerto Rican, Mexican-American, Asian-American, Native American, or other), level of education completed (from high school to graduate school), annual income level, employment status (full-time or part-time), marital status (single, married, divorced, or widowed), and political affiliation (Republican, Democratic, or other).

Analyses

A Pearson product-moment correlation coefficient (r) was computed between each of the demographic variables and PWE scores. Dummy coding (Cohen & Cohen, 1975) was used for some of the demographic variables in the present study: sex (male = 1, female = 0); race (white majority = 1, other minority = 0); political

affiliation (Republican = 1, Democratic and other = 0); and marital status (single = 1, married, divorced, and widowed = 0). The other three variables (e.g., age, educational level, and income level) are continuous variables. Therefore, the true scores of these variables were used.

In addition, one-way analyses of variance were conducted to test whether there were significant differences between or among the various groups within the demographic variables (age, sex, race, etc.). According to Buchholz (1978), the age of respondents was divided into three categories: under 30, 30-50, and over 50. The same classifications were adopted in the present study. The educational level of subjects was classified into two subgroups: college (some college and college graduate) and graduate school (some graduate school and beyond). Further, the annual income level of subjects was also divided into three subgroups: low income level under $15,000), middle income level ($15,000-30,000), and high income level (over $30,000).

Results

The means and standard deviations of the Protestant work ethic scores for different groups of subjects are presented in Table 1 and correlations among variables are presented in Table 2. Mirels and Garrett (1971) reported that the means and standard deviations of the Protestant work ethic scores for males and females were M = 85.7, SD = 15.5, and M = 85.5, SD = 16.2, respectively. Similar results were obtained from the present sample, for males (n = 321): M = 86.77, SD = 12.21; females (n = 368): M = 86.16, SD = 11.31; and total sample (n = 689): M = 86.44, SD = 11.73.

The reliability coefficient alpha reported by Mirels and Garrett (1971) for the college students was .79. In the present study, the Cronbach's alpha

(reliability) from a sample of 689 subjects was .74, indicating satisfactory internal consistency for the test as a whole.

Insert Table 1 and 2 about here

Correlational Analyses

Table 3 showed that the Protestant work ethic was negatively correlated with educational level, r (686) = -.26, $p < .001$. This result supported Hypothesis 1 in that highly educated people tended to have low endorsement of the Protestant work ethic. Hypothesis 2 was supported in that there was a positive and significant correlation between Republican Party affiliation and the Protestant work ethic, r (551) = .11, $p < .01$.

Insert Table 3 about here

As expected, no significant relationships were found between the Protestant work ethic and sex or race. Thus, we failed to reject Hypothesis 3 and Hypothesis 4.

This study did not make an a priori prediction concerning the relationship between the Protestant work ethic and age. The data in Table 3 revealed that there was a negative and significant correlation between age and the Protestant work ethic, r (685) = -.15, $p < .001$. Hence, commitment to the Protestant work ethic declines with age.

No prediction was made concerning the Protestant ethic and employment status. The data showed that the Protestant work ethic was negatively correlated with

employment status, r (419) = -.14, $p < .01$, indicating that individuals with full-time jobs had lower endorsement of the Protestant work ethic than those with part-time jobs.

Table 3 also revealed that there was a negative and significant correlation between income level and the Protestant work ethic, r (376) = -.20, $p < .001$. The result indicated that low income people tended to have strong Protestant work ethic beliefs.

Finally, the relationship between the Protestant work ethic and marital status was significant, r (662) = .10, $p < .01$. Thus, single people express a stronger commitment to the Protestant work ethic belief than do people with marital experience.

Analyses of Variance

In order to determine whether there were notable differences in adherence to the Protestant work ethic between or among the various demographic groups, one-way analyses of variance (ANOVAs) were performed to analyze Protestant work ethic scores. The results of ANOVAs are presented in Table 4.

Insert Table 4 about here

The effect of educational level on Protestant work ethic endorsement was also significant, F (1, 684) = 26.51, $p < .001$. People with some college and college degree had higher scores (M = 87.93) than people with some graduate school and beyond (M = 81.69), indicating that less well-educated (college) people tended to hold more work-related values than better-educated (graduate) people.

Table 4 also showed significant differences in Protestant work ethic

endorsement as a function of political affiliation, F (2, 548) = 4.20, $p < .05$. The results of Tukey's HSD Test showed that those who identified with the Republican Party scored significantly higher (M = 87.93) than did those who identified with the Democratic Party (M = 84.19), $p < .05$. In addition, the Independents did not differ significantly from the other two groups, $ps > .05$.

As expected, there were neither sex nor race differences on Protestant work ethic scores. When age (i.e., under 30, 30-50, over 50) was considered, however, the difference was significant, F (2, 682) = 8.34, $p < .001$. Further, the results of Tukey's HSD Test indicated that people who were under 30 scored significantly higher (M = 87.73) than those who were in the 30-50 age group (M = 83.86), $p < .05$. However, those in the over 50 group did not differ significantly from the other two groups, $ps > .05$.

Further, Table 4 also revealed significant differences in Protestant work ethic endorsement as a function of employment status, F (1, 417) = 8.45, $p < .01$. The result indicated that people with part-time jobs had higher scores (M = 88.36) than people with full-time jobs (M = 84.93).

Subjects' work ethic scores were also analyzed based on their occupations. The means of the work ethic scale for different occupational groups are presented in Table 5. The results of a one-way ANOVA showed a significant main effect, F (21, 482) = 1.97, p = .0064. Further, Tukey's HSD test indicated that personnel managers had a lower work ethic endorsement (M = 79.64) than had production workers (M = 90.67), $p < .05$.

Insert Table 5 about here

In addition, there were significant differences in Protestant work ethic endorsement as a function of income level, F (2, 373) = 10.32, $p < .001$. The results of Tukey's HSD Test showed that low income people had a higher mean score (M = 88.44) than middle income people (M = 84.63) and high income people (M = 80.69), $ps < .05$. However, there was no significant difference between middle and high income people, $p > .05$.

Finally, there were marginally significant differences in Protestant work ethic endorsement as a function of marital status, F (3, 658) = 2.56, $p = .054$. The results of Tukey's HSD Test showed that single people scored significantly higher (M = 87.36) than did married people (M = 84.80), $p < .05$. However, divorced and widowed individuals did not differ significantly from the other two groups, $ps > .05$.

Discussion

Although many research studies have found mixed results concerning the relationship between educational level and the Protestant work ethic, some recent papers found that the more education a person has, the less he or she endorses the Protestant work ethic (Furnham, 1982; Ma, 1986). In the present study, the results were in agreement with these recent findings. One possible interpretation, according to Gooding (1972), is that people with more education are less inclined to accept traditional beliefs. Another possible interpretation is that these Protestant work ethic beliefs weaken as one adjusts and learns to live with the present system. It is also possible that people with a high level of education will be able to find a better job or a professional job which is less physically involved, relatively speaking, than a non-professional job. Therefore, better educated people do not have to strive as hard as less well-educated people.

As predicted, the Protestant work ethic score was positively related to the Republican Party identification. The results were in accord with previous research findings in that Protestant work ethic scores were positively correlated with conservative (Republican) political attitudes (Beit-Hallahmi, 1979; Furnham, 1983a, 1984b; MacDonald, 1971, 1972).

No relationship was found between the Protestant work ethic and sex. The results of Buchholz (1978), Goodale (1973), Ma (1986), MacDonald (1972), Mirels & Garrett (1971) and Tang (1988) were supported by the present data. Further, Protestant work ethic endorsement was also unrelated to race which also confirmed previous findings (Buchholz, 1978; Goodale, 1973). Apparently, the Protestant work ethic is represented equally in sex and racial subgroups of this society.

The results of the present study showed that young people were oriented towards the Protestant work ethic more than older people. This result was in accordance with the findings of Buchholz (1978). One possible interpretation offered by Buchholz (1978) was that "young people enter the work force with individualistic notions and a belief in the value of work in and of itself. But after some years of being in the work force and facing the realities of the work place day in and day out, these beliefs may weaken" (Buchholz, 1978, p. 226). However, since the results of the various studies concerning age and the Protestant work ethic are mixed, further studies of a longitudinal nature are needed.

Although the results of this present study reveal that the Protestant work ethic is negatively correlated with employment status and income level, other empirical support in these matters is meager. One of the possible explanations for these findings, according to Furnham (1984b), was that high income individuals

tend to have stronger leisure ethic beliefs than low income individuals. Another possible interpretation is that part-time and/or low income subjects are also in school full-time or part-time. They may have worked more hours per week than full-time workers. Thus, these results further support the notion of attitude-behavior consistency (Ajzen & Fishbein, 1977; Fazio, Powell & Herr, 1983; Tang & Baumeister, 1984). Future studies should examine other work-related or non-work-related values (e.g., leisure ethic, etc.) and demographic variables in order to have a better understanding of people's endorsement of Protestant work ethic.

The differences among single, married, divorced, and widowed on Protestant work ethic revealed only marginal significance. That is, single people tend to have strong commitments to the Protestant work ethic. One plausible explanation is that single people may have involved in more activities and are more active than those who are married. Further, the sample size for divorced and widowed groups was smaller than other subgroups which may affect the results.

The present study also reveals that personnel managers have lower work ethic endorsement than production workers. It is plausible that personnel managers have more education than have production workers. As suggested earlier, those with higher educational level are less inclined to accept traditional values. Further, personnel managers may involve less physical work than production workers. Thus, the attitude-behavior consistency model may be helpful again, in explaining the differences between these two occupations (cf. Ajzen & Fishbein, 1977; Fazio, Powell & Herr, 1983; Tang & Baumeister, 1984).

Howell and Dipboye (1986) offered some insights concerning the endorsement of the Protestant work ethic and work motivation:

> According to some critics, all work motivation originates from external inducement. There are some compelling arguments for this position. Viewed historically, there is little reason to believe that people have some inborn desire to work. Rather, the modern work ethic appears to have arisen as the result of cultural pressures, notably Calvinistic doctrine (the Protestant ethic that work pleases God) and social Darwinism (work has survial value). Modern society has traditionally regarded highly those individuals who succeed through hard work and condemned just as vigorously those who fail for lack of effort. An elaborate system of social rewards and punishments has evolved to ensure that these attitudes are instilled in children at an early age and retained throughout their lives. (Howell & Dipboye, 1986, p. 73)

In summary, the results of the present investigation reveal that there is a strong relationship between people's belief systems and behavior tendencies. For those who work hard in their daily life, they are also the ones who endorse the work-related value. It is plausible that an individual's endorsement of the Protestant work ethic may reflect that individual's behaviors and activities in daily life and vice versa. Further, an individual's endorsement of the work ethic may also change as he or she progresses in his or her career or life. The present findings also support the notion that the endorsement of the Protestant work ethic, as measured by Mirels and Garrett's (1971) scale, is related to and a good predictor of work-related activities and behavioral tendencies (e.g., Poulton & Ng, 1988; Tang & Baumeister, 1984). Future research should examined this possibility directly using longitudinal data.

References

Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. Psychological Bulletin, 84, 888-912.

Albee, G. (1977). The Protestant ethic, sex, and psychotherapy. American Psychologist, 32, 150-161.

Aldag, R., & Brief, A. (1975). Some correlates of work values. Journal of Applied Psychology, 60, 757-760.

Aul, J. C. (1978). Some demographic and attitudinal correlates of belief in the Protestant work ethic. Unpublished master's thesis, Case Western Reserve University, Cleveland, OH.

Beit-Hallahmi, B. (1979). Personal and social components of the Protestant ethic. The Journal of Social Psychology, 109, 263-267.

Blood, M. R. (1969). Work values and job satisfaction. Journal of Applied Psychology, 53, 456-459.

Bluen, S. D., & Barling, J. (1983). Work values in white South African males. Journal of Cross-Cultural Psychology, 14, 329-335.

Buchholz, R. A. (1977). The belief structure of managers relative to work concepts measured by a factor analytic model. Personnel Psychology, 30, 567-587.

Buchholz, R. A. (1978). An empirical study of contemporary beliefs about work in American society. Journal of Applied Psychology, 63, 219-227.

Cohen, J. S. & Cohen, P. (1975). Applied multiple regression/correlation analysis for the behavioral sciences. Hillsdale, NJ: Lawrence Erlbaum Associates.

Fazio, R. H., Powell, M. C., & Herr, P. M. (1983). Toward a process model of the attitude-behavior relation: Accessing one's attitude upon mere observation of the attitude object. Journal of Personality and Social Psychology, 44, 723-735.

Furnham, A. (1982). The Protestant work ethic and attitudes toward unemployment. Journal of Occupational Psychology, 55, 277-286.

Furnham, A. (1983a). The Protestant work ethic and conservatism. Personality & Individual Differences, 4, 205-206.

Furnham, A. (1983b). The Protestant work ethic, human values and attitudes towards taxation. Journal of Economic Psychology, 3, 113-128.

Furnham, A. (1984a). The Protestant work ethic: A review of the psychological literature. European Journal of Social Psychology, 14, 87-104.

Furnham, A. (1984b). Work values and beliefs in Britain. Journal of Occupational Behavior, 5, 281-291.

Furnham, A., & Muhiudeen, C. (1984). The Protestant work ethic in Britain and Malaysia. The Journal of Social Psychology, 122, 157-161.

Goldstain, B., & Eichhorn, R. (1961). The changing Protestant ethic: Rural patterns in health, work, and leisure. American Sociological Review, 26, 557-565.

Goodale, J. (1973). Effects of personal background and training on work values of the hard-core unemployed. Journal of Applied Psychology, 57, 1-9.

Gooding, J. (1972). The job revolution. New York: Walker.

Green, R. W. (1959). Protestantism and capitalism. Boston: Heath.

Heaven, P. C. C. (1980). The Protestant ethic scale in South Africa. Psychological Reports, 47, 618.

Howell, W., & Dipboye, R. (1986). Essentials of industrial & organizational psychology (3rd Ed.). Chicago, IL: The Dorsey Press.

Kidron, A. (1978). Work values and organizational commitment. Academy of Management Journal, 21, 239-247.

Lied, T., & Pritchard, R. (1976). Relationships between personality variables and components of the expectancy-value model. Journal of Applied Psychology, 61, 463-467.

Ma, L. C. (1986). The Protestant ethic among Taiwanese college students. The Journal of Psychology, 120, 219-224.

MacDonald, A. P. (1971). Correlates of the ethics of personal conscience and the ethics of social responsibility. Journal of Consulting and Clinical Psychology, 37, 443.

MacDonald, A. P. (1972). More on the Protestant ethic. Journal of Consulting and Clinical Psychology, 39, 125-127.

McClelland, D. C. (1961). The achieving society. Princeton, NJ: Van Nostrand.

Merrens, M. R., & Garrett, J. B. (1975). The Protestant ethic scale as a predictor of repetitive work performance. Journal of Applied Psychology, 60, 125-127.

Mirels, H. L., & Garrett, J. B. (1971). The Protestant ethic as a personality variable. Journal of Consulting and Clinical Psychology, 36, 40-44.

Poulton, R. G., & Ng, S. H. (1988). Relationships between Protestant work

ethic and work effort in a field setting. Applied Psychology: An International Review, 37 (3), 227-233.

Ray, J. (1982). The Protestant ethic in Australia. The Journal of Social Psychology, 116, 127-138.

Rojek, D. (1973). The Protestant ethic and political preference. Social Forces, 52, 168-177.

Ryterband, E. C., & Bass, B. M. (1973). Work and nonwork: Perspectives in the context of change. In M. D. Dunnette (Ed.), Work and nonwork in the year 2001 (pp. 67-89). California: Wadsworth.

Sheppard, H. L., & Herrick, K. Q. (1972). Where have all the robots gone? New York: Free Press.

Tang, T. L. P. (1985, February). Effects of the Protestant work ethic and effort performance feedback on intrinsic motivation. Paper presented at the National and Western Region Conference of the Association of Human Resources Management and Organizational Behavior, Denver, CO.

Tang, T. L. P. (1986, March). Effects of the Protestant work ethic and perceived challenge on time allocated to an experimental task in a social context. Paper presented at the 32nd Annual Meeting of Southeastern Psychological Association, Kissimmee, FL.

Tang, T. L. P. (1988). Effects of work ethic and task labels on task preference. Paper submitted for publication.

Tang, T. L. P., & Baumeister, R. F. (1984). Effects of personal values, perceived surveillance, and task labels on task preference: The ideology of turn play into work. Journal of Applied Psychology,

69, 99-105.

ul Hassan, R. (1968). The belief system and job satisfaction of rural migrant and non-migrant workers in an urban area. Dissertation Abstracts, 29, 972A.

Waters, L. K., Baltis, N., & Waters, C. W. (1975). Protestant ethic attitudes among college students. Educational & Psychological Measurement, 35, 447-450.

Weber, M. (1904-1905/1958). The Protestant ethic and the spirit of capitalism. (T. Parsons, translator). New York: Scribner's. (Originally published in 1904-1905).

Wilson, H. (1970). How our values are changing. The Futurist, 5-9.

Wollack, S., Goodale, J., Wijting, J. P., & Smith, P. C. (1971). Development of survey of work values. Journal of Applied Psychology, 55, 331-338.

Table 1

Means and Standard Deviations of the Protestant Work Ethic as Arranged by the Demographic Variables

Variable	n	M	SD
1. Age			
Under 30	466	87.73	11.13
30 - 50	182	83.86	12.42
Over 50	37	83.81	12.68
Total	685	86.49	11.70
2. Sex			
Male	321	86.77	12.21
Female	368	86.16	11.31
Total	689	86.44	11.73
3. Race			
Majority (White)	619	86.48	11.73
Minority (Black and other)	70	86.13	11.84
Total	689	86.44	11.73
4. Educational Level			
College	558	87.93	11.56
Graduate School	128	81.69	11.43
Total	686	86.42	11.75

(table continues)

Table 1 (continued)

Variable	n	M	SD
5. Political Affiliation			
Republican	160	87.93	10.65
Democratic	160	84.19	12.29
Independent and other	231	85.78	11.72
Total	551	85.94	11.66
6. Employment Status			
Full-time job	249	84.93	11.97
Part-time job	170	88.36	11.73
Total	419	86.32	11.87
7. Income Level			
Under $15,000	207	88.44	11.31
$15,000 - $30,000	121	84.63	12.63
Over $30,000	48	80.69	10.33
Total	376	86.22	11.92
8. Marital Status			
Single	344	87.36	11.03
Married	283	84.80	12.01
Divorced	28	86.54	14.14
Widowed	7	85.00	12.80
Total	662	86.20	11.66

Table 2

Correlations Among Variables

Variable	2	3	4	5	6	7	8	9
1. Age	11**	03	31***	-01	50***	54***	-64***	-15***
2. Sex	-	01	17***	08*	13**	32***	-06*	03
3. Race		-	-05	12**	-01	10*	-07*	01
4. Educational Level			-	03	27***	40***	-27***	-26***
5. Political Affiliation				-	-09*	03	03	11**
6. Employment Status					-	61***	-51***	-14**
7. Income Level						-	-48***	-20***
8. Marital Status							-	10**
9. Protestant Work Ethic								-

Note. All decimals have been omitted for correlations. n varies between 323 and 689.

*p < .05; **p < .01; ***p < .001.

Table 3

Correlations of Protestant Work Ethic Scores with Demographic Variables

Variable	n	r
Age	685	-.15***
Sex	689	.03
Race	689	.01
Educational Level	686	-.26***
Political Affiliation	551	.11**
Employment Status	419	-.14**
Income Level	376	-.20***
Marital Status	662	.10**

Note. Variations in numbers are due to missing data (see Table 1). **$p < .01$, ***$p < .001$.

Table 4

Summary of Analyses of Variance

Variable	Source of Variance	df	MS	F	p	Omega Squared
Age						
	Between	2	1116.53	8.34	.000	.021
	Within	682	133.91			
Sex						
	Between	1	63.53	.46	.50	
	Within	687	137.73			
Race						
	Between	1	7.62	.06	.81	
	Within	687	137.81			
Educational Level						
	Between	1	3528.45	26.51	.000	.036
	Within	684	133.09			
Political Affiliation						
	Between	2	564.14	4.20	.016	.011
	Within	548	134.38			

(table continues)

Table 4 (continued)

Variable	Source of Variance	df	MS	F	p	Omega Squared
Employment Status						
	Between	1	1190.63	8.45	.004	.017
	Within	417	140.98			
Income Level						
	Between	2	1397.83	10.32	.000	.047
	Within	373	135.42			
Marital Status						
	Between	3	345.03	2.56	.054	.007
	Within	658	134.96			

Table 5

The Means of the Protestant Work Ethic Scale By Occupations

Occupation	n	Protestant Work Ethic
Professor	11	76.18
Personnel Manager	33	79.64[a]
Health Care Worker	13	80.77
Information/Data	7	82.43
Minister/Religious	16	82.81
Miscellaneous	12	82.83
Technician	19	82.95
Student	56	84.59
School Teacher	22	85.41
Military/Police	14	85.57
Engineer	33	85.64
Supervisor	22	86.45
Manager/Owner	39	87.15
Secretary/Clerk	44	87.45
Financial/Insurance	17	87.65
Home Maker	7	88.29
Computer Programmer	8	89.13
Cashier/Sales Clerk	32	89.25
Food Service	37	89.45
Social Service	6	89.50
Sales	22	89.55
Production Worker	33	90.67[b]

Note. Occupations not sharing a common superscript are significantly different ($p < .05$) according to the Tukey-HSD procedure.